



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/538,545

12/05/2005

Marcel Hermanus Johannes Rensen

3135-051782

1759

28289

7590

01/15/2008

THE WEBB LAW FIRM, P.C.

700 KOPPERS BUILDING

436 SEVENTH AVENUE

PITTSBURGH, PA 15219

EXAMINER

ALIE, GHASSEM

ART UNIT

PAPER NUMBER

3724

MAIL DATE

DELIVERY MODE

01/15/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/538,545

Applicant(s)

RENSEN ET AL.

Examiner

Ghassem Alie

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06/10/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/17/06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Oath/Declaration***

1. Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c). It should be noted that alteration to the date "20/7-2005" has not been initialed. In addition the date should be --07/20/2005--.

***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the sharp edge of the cutting opening as set forth in claim 27; a suction means connected to the cutting opening set forth in claim 32; a lowering means connected to the cutting opening set forth in claim 33; and drive means for the linear intermittent displacement of the stamp set forth in claim 34 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not

accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 18-30 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hashimoto et al. (2001/0020409), hereinafter Hashimoto. Regarding claim 18, Hashimoto teaches a method for releasing a slug adhering to a stamp 2 in a punching machine 1, by carrying the stamp, after performing a punching operation on a sheet material, with the active stroke at least partially through a cutting opening (a) in a cutting place 3 supporting the sheet material, and carrying the stamp during the return stroke back again through the cutting opening (a) in the cutting plate which close-fittingly encloses the stamp, wherein the cutting opening functions during the return stroke such that the side of the cutting plate 3a remote from the sheet material engages around the cutting opening as a scraping edge on the slug adhering to the stamp and releases it from the stamp. See Figs. 1-9 and paragraphs 60-64 in Hashimoto.

Regarding claim 19, Hashimoto teaches everything noted above including that the stamp is carried through the cutting opening in the cutting plate during the punching

operation such that the periphery of the slug adhering to the stamp is released over only a part of the periphery from the cutting plate.

Regarding claim 20, Hashimoto teaches everything noted above including that the stamp 2 is carried through the cutting opening (a) in the cutting plate 3 during the punching operation such that the periphery of the slug adhering to the stamp is wholly released from the cutting plate.

Regarding claim 21, Hashimoto teaches everything noted above including that the return stroke of the stamp is continued so far that the cutting opening in the cutting plate and the sheet material are left clear by the stamp.

Regarding claim 22, Hashimoto teaches everything noted above including that after the sheet material has been left clear by the stamp, the processed sheet material is removed from the cutting plate.

Regarding claim 23, Hashimoto teaches everything noted above including a sheet material for processing is placed on the cutting plate before commencing the punching operation.

Regarding claim 24, Hashimoto teaches everything noted above including the slug released from the stamp is discharged. It should be noted that the slug is discharged through the opening below the opening a, b. See Fig. 4 in Hashimoto.

Regarding claim 25, Hashimoto teaches a punching machine for releasing a slug adhering to a stamp including a cutting plate 3 provided with at least one cutting opening (a), , at least one stamp 2 for linear intermittent displacement which is displaceable between a position in which the cutting opening in the cutting plate is left clear by the stamp and a

position in which the stamp is carried through the cutting opening, and wherein the stamp passes close-fittingly through the cutting opening of the cutting plate, wherein the cutting opening in the cutting plate has a scraping edge 3a for releasing the slug adhering to the stamp. See Figs. 1-9 and paragraphs 60-64 in Hashimoto.

Regarding claim 26, Hashimoto teaches everything noted above including that the free space between the stamp and the associated cutting plate in the position where the stamp is carried through the cutting opening is smaller than 0.02 mm. It should be noted that the free space between the stamp 2 and the cutting plate or the cutting edge 3a of the cutting plate is less than 5 to 10  $\mu\text{m}$  which is less than 0.02 mm. See paragraph 63 in Hashimoto.

Regarding claim 27, Hashimoto teaches everything noted above including that the cutting plate is adapted to support a material layer for processing, and the edge of the cutting opening on the side remote from the side supporting the material layer is sharp. It should be noted the edge of the cutting opening of the cutting plate 3 that is associated with the stamp 2 is sharp. The sharp edge is located remotely from a top surface of the cutting plate that supports the material layer. It should also be noted that the remote edge of the cutting opening is as sharp as the remote edge of the cutting opening in the current application. See Figs. 4-5, 9A in Hashimoto and Figs. 1-4 in the current application.

Regarding claim 28, Hashimoto teaches everything noted above including that the the edge of the cutting opening on the side remote from the side supporting the material layer at least locally encloses an angle with a cutting edge of the stamp.

Regarding claim 29, Hashimoto teaches everything noted above including that the

cutting pate 3 is supported by a punch plate with a passage (b) for the slug connecting onto the cutting opening in the cutting plate, which passage is larger than the cutting opening. It should be noted that the top section of the die 3 could be considered to the cutting plate and the lower section of the die 3 is considered to be the punch plate. It should also be noted that the passage (b) is larger that the cutting opening (a). See Figs. 4-5 in Hashimoto.

Regarding claims 30, Hashimoto teaches everything noted above including that the punch plate supports a plurality of plates. It should be noted that each side of the cutting opening has a cutting plate that is supported by the punch support plate.

Regarding claim 34, Hashimoto teaches everything noted above including drive means 25 for the linear intermittent displacement of the stamp 2.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

To the degree that it could be argued that Hashimoto does not teach that the cutting plate is attached to a separate punch plate, the rejection below is applied.

6. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto or in view of Isamu (JP 07 132497 A).. Regarding claim 29-31, Hashimoto teaches everything noted above except separate (not integrated) plate punch that releasably supports separate punch plate. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to separate the cutting plates from the

punch in Hashimoto, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

In addition, the used of separate cutting plates releasably supported by a punch plate is well known in the art such as taught by Isamu (JP 07 132497 A). Isamu teaches a plurality cutting plates 3 releasably supported by a punch plate 11. See Fig. 1 in Isamu. It would have been obvious to a person of ordinary skill in the art to separately and releasably connect the cutting plates in Hashimoto's cutting device to the punch plate, in order to enable the user to replace the cutting plates.

7. Claims 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto. Regarding claims 32-33, Hashimoto teaches everything noted above, but Hashimoto does not explicitly teach section means or blowing means connected onto the cutting opening for discharging the slug. However, Official Notice is taken that the use of suction means or blowing means for discharging waste or slug from a stamping or a punch apparatus is old and well known in the art. Therefore, it would have been obvious to a person of ordinary skill in the art to provide Hashimoto's device with suction means or blowing means in order to discharge the waste or slug from the apparatus.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

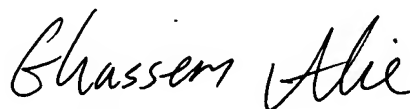
Hashimoto et al. (2001/0011493 A1) teach a punching machine having a cutting opening used as a scraping edge.



9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ghassem Alie  
Patent Examiner  
Art Unit 3724

GA

January 7, 2008